Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A Hafnium-based high-density metallic glass alloy having the ratio of elements of the formula $Hf_aCu_bNi_cAl_dY_e$ wherein;

Y comprises [~~at least~~] one element from Group IVA, IVB, VA, or VB;

a is less than 45 atomic percent;

b is from about 15 to about 35 atomic percent;

c is from about 5 to about 25 atomic percent;

d is from about 0 to about 20 atomic percent; and

e is from about 0 to about 15 atomic percent, wherein a+b+c+d+e=100.

2. (Previously presented) The metallic glass alloy of claim 1, wherein a is 44.5 atomic percent or less.

3. (Previously presented) The metallic glass alloy of claim 2, wherein Y is Ti or Nb.

4. (Previously presented) The metallic glass alloy of claim 1, further comprising a density greater than about 7 g/cm3.

5. (Previously presented) The metallic glass alloy of claim 4, wherein the density is about 10.5 g/cm3.

6. (Previously presented) The metallic glass alloy of claim 1, wherein the alloy exhibits a distinct glass transition temperature, that is at least 0.59 of the liquidus temperature of the alloy.

7. (Previously presented) The metallic glass alloy of claim 1, wherein the ratio of Cu to Ni is 2:1.

8. (Previously presented) The metallic glass alloy of claim 3, wherein the ratio of Cu to Ni is 2:1.

9. (Previously presented) The metallic glass alloy of claim 3, having about 5 or more atomic percent Ti.

10. (Previously presented) The metallic glass alloy of claim 3, having about 5 or more atomic percent Nb.

11. (Previously presented) The metallic glass alloy of claim 1, wherein d is about 10 or more.

12. (Previously presented) The metallic glass alloy of claim 1, wherein $35<a<45$, $0.1<d<20$, and $0.1<e<15$.

13. (Previously presented) An article comprising the metallic glass alloy of claim 1.

14. (Previously presented) The article of claim 13 having a thickness of at least 1 millimeter in its smallest dimension.

15. (Previously presented) The article of claim 13 having a thickness at least 3 millimeters in its smallest dimension.

16. (Previously presented) A Hafnium-based high-density metallic glass alloy composition comprising:
44.5 atomic percent hafnium;
about 27 atomic percent copper;

about 13.5 atomic percent nickel;
about 10 atomic percent aluminum; and
about 5 atomic percent titanium or niobium.

17. (Previously presented) The composition of claim 16 having a density greater than 7 g/cm3.

18. (Previously presented) The composition of claim 16, having a density of about 10.9 g/cm3 or more.

19. (Previously presented) The composition of claim 16, wherein the composition exhibits a distinct glass transition temperature of at least 0.59 of the liquidus temperature of the composition.

20. (Previously presented) An article comprising the metallic glass alloy of claim 16.

21. (Previously presented) The article of claim 20 having a thickness of at least 1 millimeter in its smallest dimension.

22. (Previously presented) The article of claim 20 having a thickness of at least 3 millimeters in its smallest dimension.

23. (Previously presented) The article of claim 20, wherein the ratio of copper to nickel is 2:1.

24. (Previously presented) The article of claim 20, wherein the metallic glass is at least partially amorphous.

25. (Previously presented) The article of claim 20, wherein the article has an elastic strain to failure between about 1.8 and 2.2 percent elongation.

26. (Previously presented) The article of claim 20, wherein the object has a quasi-static compressive yield stress of between about 1.8 and 2.2 GPa.

27. (Previously presented) The article of claim 20, wherein the object has a dynamic high-strain-rate yield stress of between about 1.3 and 1.6 GPa.

28. (Previously presented) A metallic glass alloy comprising Hf, Cu, and Ni in eutectic combination with Al, Ti, Nb or a combination thereof, having a density greater than about 7 g/cm3.

29. (Previously presented) A method for forming a Hafnium-based high-density metallic glass alloy comprising:
combining 44.5 atomic percent hafnium;
about 27 atomic percent copper;
about 13.5 atomic percent nickel;
about 10 atomic percent aluminum; and
about 5 atomic percent titanium or niobium.

30. (Previously presented) The metallic glass alloy of claim 1, wherein the alloy is formed by electric arc melting.

31. (Previously presented) The metallic glass alloy of claim 1, wherein the alloy is formed by induction melting.

32. (Previously presented) The article of claim 16, wherein the article is formed by vacuum suction casting.

33. (Previously presented) The article of claim 16, wherein the article is formed by permanent mold casting, injection die casting, pour casting, planar flow casting, melt spinning, or extrusion.

34. (Previously presented) A method for making an Hafnium-based high-density alloy generally represented by the formula $Hf_aCu_bNi_cAl_dY_e$, wherein Y includes at least one element selected from Group IV or Group V transition metal elements, wherein Hf is not equal to Y, Group VA, VIII, IVB, or VB, wherein a+b+c+d+e=100% (atomic percent), and a is less than 45 in an invariant combination.

35. (Previously presented) An alloy according to Claim 34 invariantly combining Hf, Cu, and Ni with Al, and Ti or Nb to form a metallic glass alloy having a density greater than about 7 g/cm3.

36. (Previously presented) The alloy of Claim 35 wherein the alloy contains Al.

37. (Previously presented) The alloy of Claim 36 wherein the alloy contains Ti or Nb.

38. (Previously presented) The alloy of Claim 35 wherein the alloy contains an element from Group IVA or Group IVB.

39. (Previously presented) The alloy of Claim 36 wherein the alloy contains an element from Group IVA or Group IVB.

40. (Previously presented) The alloy of Claim 34 wherein preferably $35<a<45$, $15<b<35$, $5<c<25$, $0<d<20$, and $0<e<15$.